

which can be separated only with partial splitting of the substrate which comprises forming said bonds with partially self-adhesively treated backing materials prepared according to Claim 1.

No Antecedence

REMARKS

This Preliminary Amendment is being filed to conform the claims to conventional format and to eliminate multiple dependency.

Favorable action is respectfully solicited.

ADDITIONAL FEE

Please charge any insufficiency of fees, or credit any excess, to Deposit Account No. 14-1263.

Respectfully submitted,

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MARKED-UP COPY OF AMENDED CLAIM,
SHOWING CHANGES RELATIVE TO PREVIOUS VERSION

Claim 1 (amended). Process for producing a partially self-adhesively treated backing material, comprising the following steps:

- a) coating a first backing material with domes₁ [and/or] polygeometric structural forms₁ or both, of self-adhesive composition,
 - a1 the add-on of the self-adhesive composition to the backing material being at least 3 g/m² and
 - a2 the surface coverage of the backing material being at least 1%,
- b) permanent deformation of at least some of the domes₁ [and/or] polygeometric structural forms or at least some of each.

Claim 2 (amended). Process according to Claim 1, [characterized in that] wherein at least 10%[, preferably at least 50% and, with very particular preference, 75%] of the domes₁ [and/or] polygeometric structural forms or of both of them are permanently deformed.

Claim 3 (amended). Process according to [Claims 1 and 2, characterized in that] Claim 1, wherein at least some of the domes [and/or] or polygeometric structural forms or of both are permanently deformed to an extent such that a closed surface is formed [and/]or the domes [and/]or polygeometric structural forms or both are connected to one another or to each other at least partially by means of lines.

Claim 4 (amended). Process according to [Claims 1 to 3, characterized in that] Claim 1, wherein permanent deformation of the domes [and/]or polygeometric structural forms takes place by means of a controlled temperature regime during

coating [and/]or by the introduction of radiative energy, mechanical energy, [or] secondary energy or by a combination thereof.

Claim 5 (amended). Process according to [Claims 1 to 4, characterized in that] Claim 1, wherein the self-adhesive composition is applied to the first backing material by halftone printing, thermal screen printing or gravure printing or by the nozzle process.

Claim 6 (amended). Process according to [Claims 1 to 5, characterized in that] Claim 1, wherein the add-on of the self-adhesive composition to the first backing material is greater than 6 g/m^2 [, preferably from 20 to 1000 g/m^2 and, with particular preference, from 40 to 180 g/m^2].

Claim 7 (amended). Process according to [Claims 1 to 6, characterized in that] Claim 1, wherein the first backing material is a roller (6) or a belt with an abhesive surface, the abhesive surface comprising [in particular] a coating of silicones or fluorine compounds or a plasma-coated release system, which is applied [very particularly] with a weight per unit area of from 0.001 g/m^2 to 3000 g/m^2 [, preferably from 100 to 2000 g/m^2].

Claim 8 (amended). Apparatus as recited in [according to Claims 1 to 7, characterized in that] Claim 7, wherein the abhesive properties of the surface of the roller 6 are matched so that the applied self-adhesive composition adheres to the thermally conditioned roller[, preferably to a cooled roller].

Claim 9 (amended). Process according to [Claims 1 to 8, characterized in that] Claim 1, wherein the domes and/or polygeometric structural forms are transferred to a second backing material during or after the permanent deformation.

Claim 10 (amended). Process according to Claim 7, [9, characterized in that] wherein the domes polygeometric structure forms or both are transferred to a second backing material during or after the permanent deformation, the second backing material is guided against the roller (6) or the belt by way of a pickup roller (7) which is positionable in the peripheral direction and/or radial direction with respect to the adhesive roller or to the adhesive belt and/or may be applied with a pressing force, so that the degree of permanent deformation may be influenced.

Claim 11 (amended). Process according to Claim 9, [characterized in that] wherein the transfer of the self-adhesive composition takes place by means of a pair of deflection devices (8, 9) which is arranged at different positions along the periphery of the adhesive roller (6) or of the belt, the second backing material being guided a distance along the surface of the adhesive roller (6) or the belt.

Claim 12 (amended). Process according to Claim 11, [characterized in that] wherein the deflection devices (8, 9) comprise rollers which are positionable in the peripheral direction [and/or], radial direction or both with respect to the adhesive belt [and/or may be] and which optionally are applied with a pressing force so that the degree of permanent deformation [may be] is optionally influenced.

Claim 13 (amended). Process according to [Claims 1 to 12, characterized in

that] Claim 1, wherein the first backing material has a surface [having] which has a random or regular three-dimensional geometric structure.

Claim 14 (amended). Process according to [Claims 1 to 13, characterized in that] Claim 1, wherein the self-adhesive composition is a hotmelt adhesive composition.

Claim 15 (amended). Process according to [Claims 1 to 14, characterized in that] Claim 1, wherein the profile of viscoelastic properties of the domes [and/or], polygeometric structural forms or of both is established by controlling the heat energy from the coating process, by the at least partial introduction of additional energy, or by the at least partial removal of heat energy, or by a combination [of the techniques] thereof.

Claim 16 (amended). Process according to [Claims 1 to 15, characterized in that] Claim 1, wherein the domes [and/or], polygeometric structural forms or both applied to the backing material have a plasticity-elasticity ratio at the time of deformation, at a frequency of 100 rad/s, of greater than 0.3 to 50.

Claim 17 (amended). Process according to [Claims 1 to 16, characterized in that] Claim 14, wherein the hotmelt adhesive composition is in foamed form, [and/or can be] and is optionally crosslinked by means of electron beams [and/or], UV or both.

Claim 18 (amended). Process according to [Claims 1 to 17, characterized

in that] Claim 1, wherein the backing material [on steel] has a bond strength on steel to the reverse face of the backing of at least 0.5 N/cm[, in particular a bond strength of between 2 N/cm and 12 N/cm].

Claim 19 (amended). [Use of a partially self-adhesively treated backing material according to one or more of the preceding claims for industrial and medical products, especially p]Plasters, medical fixings, wound coverings, doped systems, [especially those which allow the release of substances,] and orthopaedical and phlebological bandages and dressings comprising partially self-adhesively treated backing materials prepared according to Claim 1.

Claim 20 (amended). [Use according to Claim 19, characterized in that,] Plasters, medical fixings, wound coverings, doped systems and orthopaedical and phlebological bandages and dressings according to Claim 19, wherein following its production, the partially self-adhesively treated backing material is lined or provided with a wound pad or padding and/or is sterilized[, preferably by means of γ (gamma) radiation].

Claim 21 (amended). [Use of a partially self-adhesively treated backing material according to one or more of the preceding claims for i]Industrial and reversible fixings comprising the partially self-adhesively treated backings prepared according to Claim 1, which on removal cause no damage or injury to [a variety of] substrates[, such as] of paper, plastics, glass, textiles, wood, metals [and] or minerals.

